### West Virginia Department of Environmental Protection Division of Air Quality

## **Fact Sheet**



# For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05700003-2012**Application Received: **March 7, 2012**Plant Identification Number: **05700003** 

Permittee: Kingsford Manufacturing Company

Facility Name: Beryl Plant

Mailing Address: P.O. Box 464, Parsons, WV 26287

Physical Location: Beryl, Mineral County, West Virginia

UTM Coordinates: 666.0 km Easting • 4371.0 km Northing • Zone 17

Directions: The Facility is located adjacent to WV Route 46 in Mineral County near

the WV - Maryland border just west of the town of Luke, MD.

#### **Facility Description**

The Kingsford Manufacturing Company Beryl Plant produces char from bark and sawdust raw materials. The bark and sawdust is sized, dried in a rotary dryer and then charred in a multi-hearth retort furnace. The dryer and the furnace air emissions are controlled by cyclone collectors which are exhausted to a common after combustion chamber (ACC) for oxidation. Air emissions from the ACC stack are subject to emissions limits in Permit R13-2117D. The char is quenched and conveyed into covered trucks for transport to the Kingsford Parsons, WV plant for charcoal manufacturing.

Facility SIC Code: 2861 Chemicals and allied products - gum and wood chemicals.

#### **Emissions Summary**

Plantwide Emissions Summary* [Tons per Yea
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Regulated Pollutants	<b>Potential Emissions</b>	2011 Actual Emissions
Carbon Monoxide (CO)	29.02	1.08
Nitrogen Oxides (NO <sub>X</sub> )	182.16	66.88
Lead (Pb)	0.008	0.004
Particulate Matter (PM <sub>2.5</sub> )	65.53	Not reported
Particulate Matter (PM <sub>10</sub> )	98.74	Not reported
Total Particulate Matter (TSP)	166.85	98.17
Sulfur Dioxide (SO <sub>2</sub> )	42.00	24.94
Volatile Organic Compounds (VOC)**	8.10	1.27

 $PM_{10}$  is a component of TSP.

<b>Hazardous Air Pollutants</b>	Potential Emissions	2011 Actual Emissions
Methanol	4.5	0

Some of the above HAPs may be counted as PM or VOCs.

#### **Title V Program Applicability Basis**

This facility has the potential to emit 182.16 TPY of Nitrogen Oxides. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Kingsford Manufacturing Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR7	Fugitive dust, particulate matter, and visible emissions
	1.500.00	
	45CSR10	Sulfur dioxide emissions.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for sources
	45CSR16	Standards of Performance for New
		Stationary Sources Pursuant to 40CFR60
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.

<sup>\*</sup> Includes Facility Fugitive emissions and Natural Gas combustion emissions

<sup>\*\*</sup> Including Gasoline tank E-05-01 PTE for VOC (0.12 TPY) and Diesel Oil Tank E-05-02 PTE for VOC (0.005 TPY)

	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 60, Subpart JJJJ	Standards of Performance for Stationary
		Spark Ignition Internal Combustion Engines
	40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standards for Hazardous
		Air Pollutants for Stationary Reciprocating
		Internal Combustion Engines (RICE)
	40 C.F.R. Part 63, Subpart CCCC	CC - National Emission Standards for
		Hazardous Air Pollutants for Source
		Category: Gasoline Dispensing Facilities
	40 C.F.R. Part 64	Compliance Assurance Monitoring (CAM)
		Plans
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2117D	December 10, 2002	
G60-C047	August 17, 2012	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

There was one administrative amendment (AA01) since the previous renewal (revision of CAM requirement 6.2.2). Also, General Permit G60-C047 was recently issued for a new emergency generator (006-01) installation.

- 1. Facility mailing address on page 2 was changed to "P.O. Box 188, Westernport, MD 21562".
- 2. Emission Units Table 1.1 added a natural gas-fired 238 HP emergency generator 006-01 (Emission Point S-07) permitted by G60-C047. It is a replacement of an existing 48 HP emergency generator installed in 1996 (it was not included in the Emission Units Table because it was considered an "insignificant activity" until 40 C.F.R Part 63 Subpart ZZZZ was promulgated). Gasoline Tank E-05-01 size corrected from 1,000 gal to 500 gal (a typo).
- 3. Requirement 3.3.2 (new) was added based on permit R13-2117D, condition B.2. Former requirement 3.3.2 was re-numbered to 3.3.3.

- 4. Requirement 3.7.2 was revised to delete rule 45CSR15, because the rule was repealed, and also to correct applicability determinations for some state and federal rules.
- 5. Requirements 4.4.3 and 5.4.3 were revised to correct a typo ("pounds" were changed to "tons").
- 6. Requirements 6.2.3 and 7.2.1 were revised to remove a word "normal" due to difficulties to define "normal facility operation".
- 7. Requirements 6.2.5 through 6.2.9 were added to include CAM boilerplate requirements for the After Combustion Chamber C-08.
- 8. Requirement 8.1.1 was added to include emergency generator 006-01 emission limits during non-emergency operation (based on permit G60-C047).
- 9. Requirement 8.1.2 was added to include the 40 C.F.R Part 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*, provision applicable to the emergency generator 006-01. Per §63.6590(a)(2)(iii), this SI engine is considered a new unit (area source unit constructed on or after June 12, 2006). Therefore, per §63.6590(c)(1), it is only subject to 40 C.F.R Part 60 Subpart JJJJ provisions.

Emission Unit ID	Design Capacity	Ignition	Use/Type	Year installed	HAP Source Classification
006-01	238 HP	Spark Ignited	4SRB, Emergency	2012 (new)	Area source

10. Requirements 8.1.3, 8.3.1, 8.4.1 and 8.5.1 were added to include provisions of 40 C.F.R Part 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, applicable to the emergency generator 006-01. Table 1 of 40 C.F.R Part 60, Subpart JJJJJ sets forth emission limits for emergency engines > 130 HP (requirement 8.1.3). Also, emission limits for the generator were included in the permit in requirement 8.1.1 (based on the engine's certification by USEPA in compliance with the standards under 40 C.F.R. 60, Subpart JJJJ). As shown in the Table below, permit limits are established well below the 40 C.F.R 60, Subpart JJJJ emission standards, and are in compliance with these standards:

Pollutant	Permit limits	Subpart JJJJ Table 1 emission standards	
	LB/hr	g/HP-hr	LB/hr
СО	0.16	4.0	2.10
NO <sub>x</sub>	0.06*	2.0	1.05
VOC	-	1.0	0.53

\*NOx + THC

Since the emergency generator 006-01 is certified by USEPA as in compliance with the standards under 40 C.F.R. 60, Subpart JJJJ, it is not subject to testing if it is operated and maintained according to the manufacturer's written emission-related instructions. Otherwise, initial performance testing is required as per §60.4243(f). The testing needs to be performed in accordance with the §\$60.4244(a) through (g) (requirement 8.3.1) and reporting should be done per §60.4245 (d) (requirement 8.5.1).

11. Section 9.0 - added to include requirements of 40CFR63 Subpart CCCCC, *National Emission Standards* for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, applicable to Gasoline Tank E-05-01. Per §63.11111(a), the Gasoline Tank E-05-01 is considered a Gasoline Dispensing Facility (GDF) located at an area source. The Beryl facility uses approximately 200 gal of gasoline per year to fuel their vehicles (monthly tank throughput it less than 10,000 gallons), therefore per §63.11111(b) the only applicable requirements are listed in §63.11116. The Gasoline Tank was installed in 1990, therefore per §63.11112 (d) it is considered existing, and per §63.11113(b) it has to be in compliance with the requirements of the subpart "no later than January 10, 2011".

#### **Non-Applicability Determinations**

1. The following requirements have been determined not to be applicable to the subject facility due to the following:

Requirement	Regulatory Citation	Basis for Non-Applicability
PM Emissions from Fuel Combustion in Indirect Heat Exchangers	45CSR2	There are no Indirect Heat Exchangers at the facility
PM emissions from Coal Preparation and Handling Plants	45CSR5	No coal handling operations at Beryl facility.
PM emissions from an incinerator	45CSR§6-4.1	The PM emission standard from 45CSR7 (45CSR§7-4.1) also applies and is more stringent. Because of the "inconsistency between rules" provision in 45CSR6 and 7, the more stringent rule will apply and therefore the PM standard from 45CSR6 is moot and the Permit Shield applies.
Opacity limits for an incinerator	45CSR§§6-4.3 and 4.4	The opacity standard from 45CSR7 (45CSR§§7-3.1 and 3.2) also applies and is more stringent. Because of the "inconsistency between rules" provision in 45CSR6 and 7, the more stringent rule will apply and therefore the opacity requirement from 45CSR6 is moot and the Permit Shield applies.
Type "d" chemical operation source	45CSR7, Table 45-7A	This facility was previously determined by the Director as type "a" source, not a type "d" source
Testing, Monitoring, Recordkeeping and Reporting of Sulfur Oxides emissions	45CSR§10-8	Per 45CSR§10-10.3 partial wood combustion during the manufacture of charcoal shall be exempt from this requirement
Preparation of standby plans for reducing the emissions of air pollution during periods of an Air Pollution Alert, Air pollution Warning, and Air pollution Emergency	45CSR§11-5.1	This facility is not in Priority I or II regions, therefore it is not subject to this requirement
PSD source	45CSR14	Emission limits and production caps are accepted by the facility to avoid triggering PSD
Federal NSPS standards	45CSR16 40CFR60	No affected sources at Beryl facility
Fugitive emissions from material handling	45CSR17	Per 45CSR§17-6.1 if sources are subject to 45CSR7 they are exempt from the requirements of this Rule
NSR permitting for non-attainment areas	45CSR19	Beryl facility is not in affected areas
VOC emissions regulations	45CSR21	Beryl facility is not in affected areas
Emissions of toxic air pollutants	45CSR27	Beryl facility does not operate any "chemical processing units" and does not use listed chemicals
Federal Acid Rain provisions	45CSR33 Title IV of CAAA	No affected sources at Beryl facility
CAIR NOx/SO <sub>2</sub> Trading Program	45CSR39, 45CSR40, 45CSR41	No affected sources at Beryl facility

Requirement	Regulatory Citation	Basis for Non-Applicability
Regional Haze Rule	40CFR§§51.300-309	Beryl facility was constructed prior to 1977, but it doesn't have PTE for any affected pollutant exceeding 250 TPY
40 C.F.R. Part 63	Subpart JJJJJJ	There are no affected sources at this facility
Compliance Assurance Monitoring (CAM) Rule	40CFR64	Cyclones C-05, C-06 and C-07 are used primarily for product recovery, therefore they are defined as "inherent process equipment" per 40CFR§64.1, and do not require a CAM plan.

- 2. The federal Tailoring Rule for greenhouse gases (GHG) is not applicable to the facility for the following reasons:
  - According to the renewal permit application information, potential-to-emit for GHG emissions (non-biogenic) for the Beryl plant is 35,723 tpy CO2e. The major source threshold for GHG emissions under the Tailoring Rule is 100,000 tpy CO2e, therefore it is a minor source of GHG emissions.
  - 2) Kingsford Manufacturing Co. has not submitted any applications for a modification under PSD after January 2, 2011.

#### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: October 18, 2012 Ending Date: November 19, 2012

All written comments should be addressed to the following individual and office:

Natalya V. Chertkovsky-Veselova Title V Permit Writer West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Point of Contact**

Natalya V. Chertkovsky-Veselova West Virginia Department of Environmental Protection Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304

Phone: 304/926-0499 ext. 1220 • Fax: 304/926-0478

#### **Response to Comments (Statement of Basis)**

On October 29, 2012 we received the following comments for the Kingsford Manufacturing Company:

- 1. "Add 40 CFR Part 63 Subpart CCCCCC into the "Legal and Factual Basis for Permit Conditions" to cover our current gasoline dispensing equipment."
- 2. "We are currently well below the 10,000 gallons/month threshold for this site and we are currently limited to a dispensing tank of only 500 gallons."

#### Answer:

- 1. Based on our determination, we also concluded that the 40 CFR Part 63 Subpart CCCCCC, *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*, is applicable to the facility's Gasoline Tank E-05-01. Therefore, we included applicable requirements of this subpart in Section 9.0 of the permit, and also added description of the change to the *Determinations and Justifications* section of the Fact Sheet (item 11).
- 2. Gasoline Tank E-05-01 size was corrected from 1,000 gal to 500 gal in the Emission Units Table 1.1 (*Determinations and Justifications* section of the Fact Sheet, item 2).